



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

ROBINSON et al.

CASE NO: AM100401

SERIAL NO: 10/705,716

GROUP ART UNIT: 1653

FILED: NOVEMBER 10, 2003

EXAMINER: A. DESAI

FOR: A NOVEL PTH RESPONSIVE GENE

**DECLARATION UNDER 37 C.F.R. § 1.131**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In the Non-Final Office Action mailed on June 15, 2006, the Examiner rejected claims 8-12 and 38-42 under 35 U.S.C. § 102(a) as being anticipated by Tanner SM *et al.* (Proc. Natl. Acad. Sci. USA 98:13901-06 (2001)). Specifically, the Examiner asserted that SEQ ID NO:2 and SEQ ID NO:10 of the above-identified application were anticipated by Tanner SM *et al.*'s deposit of polynucleotide sequences that encode the polypeptides of SEQ ID NO:2 and SEQ ID NO:10. Reference to SEQ ID NO:10 has been deleted from the present application.

I, John Robinson, declare that the amino acid sequence at issue, SEQ ID NO:2, was reduced to practice in the United States prior to the online publication date of Tanner SM *et al.* I note that my declaration is to be construed as swearing behind the online publication date of the Tanner SM *et al.* reference, which the website for PNAS states is November 13, 2001 (see <http://www.pnas.org/content/vol98/issue24/>). Further to this declaration, I attach signed notebook pages (Exhibit 1), with dates redacted, that exemplify the reduced to practice sequence (see highlighted text).

As a person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. I

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also declare that all statements were made with knowledge that willful false statements, and the like, are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and any such willful false statements may jeopardize the validity of either the patent application or any patent issuing thereon.

Respectfully Submitted,

12/6/06

John A. Robinson

Date

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BOOK PAGE

PROJECT NO.

TITLE

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Page 3

r3f22 g+1 8-16-00.mpd (1 &gt; 2176) Site and Sequence

Page 2

Page 1

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r3f22 g+1 8-16-00.mpd (1 > 2176) Site and Sequence  
Enzymes : 126 of 478 enzymes (Filtered)  
Settings : Circular, Certain Sites Only, Standard Genetic Code

i(G)

BspDI EcoRV EcoRI BssSI Eco52I XmaIII AscI BssHII  
CGGTATCGATACGCTTGATATCGAATTCGGCAGCAGCCGGGCTGAGCCGACGCCGAGCCGCAAGCCGAACGGCCGCTGGGCGGCCCCG 90  
GCCATAGCTATGCGAACTATAGCTTAAGCCGTGCTCGGCCGACTCGGCGTCGGCGTCGGCGTTGCGGCTGCGGCGACCCGCGGGGCG

R Y R Y A . Y R I R H E P G . A A A A A A S R T A A G R A R  
G I D T L D I E F G T S R A E P O P O P O A E R P L G A P A  
T V S I R L I S N S A R A G L S R S R S R K P N G R W A R P

BsaI  
Eco31I  
Cfr9I  
PspAI  
XmaI  
SmaI Tth111I

AACAGGGGAGGATGGGCTGGGGCGGAGCCGAGCCGATGCCATCGAGCCCCGCTACTATGAGAGCTGGACCCGGGAGACCGAGTCCACCT 180  
TTGTCCCTCTACCCGACGCCGCCCTCGGCTCGGCTACGGTAGCTCGGGCGATGATACTCTGACCTGGGCCCTCTGCTCAGGTGGA

N R G G W A A A G A E P (M) P S S P A T M R A G P G R P S P P  
T G E D G L R R E P S R C H R A P L L . E L D P G D R V H L  
O . Q . G R (M) G . C . G . G . S . R . A . D . A . I . E . P . R . Y . Y . E . S . W . T . R . E . T . E . S . T .

BspI

GGCTACCTACACGACTCGGACGCGCTGCCAGCGCCGAGCCACGGACAGCGGCCCGAGGCGGGCGGCTGCACGCGGGTGTGCTGG 270  
CCGAGTGGATGTGGCTGAGCCTGCGCGACGGGTGCGGGCTCGGTGCTGCGCGGGGCTCCGCCCGCGGACGTGCGCCACACGACC

G S P T P T R T R C P A P O P R T A A P R R A A C T R V C W  
A H L H R L G R A A O R R S H G O R P R G G R P A R G C A G  
W L T Y T D S D A L P S A A A T D S G P E A G G L H A G V L

BbsI  
EclHKIPstI  
BspMI

SanDI EclHKI

AAGACGGGCGCTCTAAGCGTGTGCTCGACCTGCAGCCCCAGGTGGAATAGCCAACCCAGAGAAGAAGATGAACGTGGGACCCAAT 360  
TTCTGCCCGGCGAGGATTGCCACACCGGCTGGACGTGGGGTCCACCTTATCGGTTGGGTCTCTTCTTCTACTTGACACCTGGGTTA

K T G R P L T V C S D L O P O V E . P T O R R R . T V G P N  
R R A V L . R C A P T C S P R W N S O P R E E D E L W D P M  
E D G P S S N G V L R P A A P G G I A N P E K K M N C G T O

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PROJECT NO.

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Page 3

Page 2

3f22 g+i 8-16-00.mpd (1 &gt; 2176) Site and Sequence

3f22 g+i 8-16-00.mpd (1 &gt; 2176) Site and Sequence

Bpu10 I      Bpu10 I      Xcm I

GTCCCAACTCAGAGCCTCAGCTCAGGCCCTCTGACCCAGAGCAGAATGGCCTTTGGACACAGAGGCTAAAAGGGATGCCAAGCGAA 450

CAGGGTTGAGTGTCTCGGAGTCGAGTCCGGGAGACTGGGTCTTCGTCTTACCGGAAACCTGGTGTCTCCGATTTTCCCTACGGTTCGCT

V P T H R A S A D A L . P R S R M A F G P O R L K G M P S E

S O L T E P O L R P S D P E A E W P L D H R G . K G C O A N

C P N S O S L S . S G P L T O K O N G L W T T E A K R D A K R

TGTCTGCAAGAGAAGTCGCTATCAGCGTCACAGAGAATATCCGGCAGATGGACAGAAGTAAAAGGGTCACAAAGAACTGCATCAATTAGC 540

ACAGACGTTCTCTTCAGCGATAGTCGAGTGTCTCTTATAGGCCGTCTACCTGTCTTCATTTTCCAGTGTTCCTTGACGTAGTTAATCG

C L O E K S L S A S O R I S G R W T E V K G S O R T A S I S

V C K R S R Y O R H R E Y P A D G O K . K G H K E L H O L A

M S A R E V A I S V T E N I R O M D R S K R V T K N C I N

AlwN I      Ssp I

AGTGTCTGGGTGTGGAAGCACATGAACCTCTTTGTGGCGTCCAGTCAAAGAATATTGAAGAAGTGGGTGTCACCTCACTGAACGTGGATGC 630

TCACAGACCCACACCTTCGTGTACTTGAAGAAACACCGCAGGTGAGTTTCTTATAACTTCTTACCCACAGTGAGTGACTTGCACCTACG

S V W V W K H M N F F V A S S O R I L K K W V S L T E R G C

V S G C G S T . T S L W R P V K E Y . R S G C H S L N V D A

O C L G V E A H E L L C G V O S K N I E E V G V T H . T W M

Pra III

CTCTGAGCGACGCACGGCCACCCACGCGGTGACGACCATCCCGGTTTCTGTTTATCACATACAGAAAATACATCGAAAAGTCTCTGGAAT 720

GAGACTCGTCTCGGTGCGGTGGGTGCGCCACTGCTGGTAGGGCCAAAGGACAAATAGTGTATGTCTTTTATGTAGCTTTTCAGGACCTTA

L . A T H G H P R G D D H P G F L F I T Y R K Y I E K S W N

S E R R T A T H A V T T I P V S C L S H T E N T S K S P G I

P L S D A R P P T R . R P S R F P V Y H I O K I H R K V L E

Xmn I      Van91 I      Pst I      AlwN I      Bsp19 I

BstAPI      Nco I

ATGTTACAGATTGCCAAACTATGGTTTGTCTCTCTGAGCTTCCGTAGCAGGGTCTGCTGTAACCATGGTGAAGCCCGTGGGCC 810

TACAAGTGTCTAACGGTTTGATACCAACAAAAAGGAGAGACGTGGAAGGCATCGTCCAGACGACATTGGTACCACTTCGGGACCCCGG

M F T D C O T M V C F S S L O L P . O G L L . P W . S P W A

C S O I A K L W F V F P L C S F R S R V C C N H G E A R G P

Y V H R L P N Y G L F F L S A A S V A G S A V T M V K P V G

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BOOK	PAGE
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r3f22 g+i B-16-00.mpd (1 > 2176) Site and Sequence

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 Xma1  
 Sma1  
 Ssp1  
 Eco1CR1  
 Sac1  
 Sst1  
 Nhe1

TGTGAATGAATATTGGAATCCCGGGGCAAGGAGCTCACGCTAGCGTAGAAATTTACAGTGGTGGTTTCGGACAAGCTCCCTTTTCT  
 ACACCTACTTATAACCTTAGGGGCCCGTTCTCGAGTGCATCGCATCTTTAAAGTGTCACGCACCAAGCCTGTTGAGGGAAAAGGA

900

C H E I S D C V V S D K L P F P  
 C H E I S D C V V S D K L P F P

ACACTTACTTATAACCTTAGGGGCCCGTTCCTGAGTGCCTT

C E I L E S P G O G A H A S V E I S D C V V S D K L P F P  
V N E Y W N P R G K E L T L A R R N F T V R G F G O A P F S  
L M N I G I P G A R S R

Pra I Bst98 I  
 CTTTCTTTTAAATACGGCCATTGTTTCACTTAAGAGCTGGCTCTACCAACTCTAAACTCAAAAATACAAGAATCAGAGAAACAGAG 990  
 GGAAAGAAAAATTTATGCCGGTAACAAAGTGAATTCTCGACCGAGAGTGGTTGAGATTGAGTTTTATGTTCTTAGTCTCTTTGTCTC  
 N K I K N T R I R E T E  
 P

GGAAAGAAAAATTTATGCGGTAACAAAGTGAATTCCTGACCCGAGT  
P F F L N T A I V F T . E L A L T N S K L K N T R I R E T E  
L S F . I R P L F S L K S W L S P T L N S K I Q E S E K O R  
S F L F K Y G H C F H L R A G \_ S H O L . T O K Y K N O R N R

AGACTCAGAATGAGATTTCAGTCTTAGCTTACGTCGCTGACTCCCCGGTGCCTATGCGGTGCCCTTAGGAGGTGTCTATGACACACAC  
TCTGAGTCTTACTCTAAGTAGTCAGGATCGAAGTGCACGACTGAGGGGCCACGGATACGCCACGGAATCTCTCCACAGATACTGTGTGTG

TCTGAGTCTTA CTCTAAGTAGTCAGGATCGAAGTGACAGCATTGAGGGCCGC

R L R M R F I S P S F T C . L P G A Y A V P L G G V Y D T H  
D S E . D S S V L A S R A D S P V P M R C L . E V S M T H T  
E T O N E I H O S . L H V L T P R C L C - G A F R R C L . H T

[illegible]

TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGACAGC

T H T H T H T H T H T H L F L L Y L E R S P R L A S G I  
H T H T H T H T H T H T C S S S T W K G L P G W H O A L  
H T H T H T H T H T H T P V P P L P G K V S O A G I R H

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BOOK PAGE

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22 g+1 8-16-00.mpd (1 &gt; 2176) Site and Sequence

Bsp120 I  
Bsp I  
Apa I  
BspM I  
BspLU11 I

GGCTTCCGAATCACAATGTCACATGTTTGGGGCCCTTGACCCCAACCTGCACCCGCTTTGGGACCTAGCTCCATGTGGCTTTTCCCATAG 126C  
CCGAAGGCTTAGTGTTACAGTGTAACAAACCCGGAACGTGGGTGGACGTGGGCGAAACCTGGATCGAGGTACACCGAAAAGGGTATC  
G F R I T H S H V W G P C T O P A P A L G P S S M W L F P  
A S E S O C H M F G A L A P N L H P L W D L A P C G F S H S  
W L P N H N V T C L G P L H P T C T R F G T L H V A F P I

Cfr9 I  
PspAI  
Xma I  
Sma I

Bpm I  
Pvu II

CTTTCTAGTTCCTGTTCTTCTCATGGACTTTGTACTCCAGTCAGGTCATTTGCAGCTGTAATCAAAGACTGGACACCACTCCCGGGGA 135C  
GAAAGATCAAGGGACAAGAAGAGTACCTGAAACATGAGGTCAGTCCAGTAAACGTCGACATTAGTTTCTGACCTGTGGTGAGGGCCCCCT  
L S S S L F F S W T L Y S S O V I C S C N O R L D T T P G G  
F L V P C S S H G L C T P V R S F A A V I K D W T P L P G E  
A F F P V L L M D F V L O S G H L O L S K T G H H S R G

BstE II  
Avt II  
Dra III  
Bgl I  
BsrG I

AGGTGACCTAGGAACACATGGTGACACACAGATGCCCCCTTGGCCTTTCTGTACACAGCCCAAGGACCGTGTATTGTTGATCTGCA 144C  
TCCACTGGATCCTGTGTACCCTGTGTGCTACGGGGGAACCGGAAAGACATGTGTGCGGGTCTTGGCACAATAAAACCATAGACGT  
R P R N T W H T R C P L G L S V H S P K D R V I L V S A  
G D L G T H G D T H D A P L A F L Y T A P R T V L F W Y L O  
K V T E H M V T H T M P P W P F C T O P O G P C Y F G I C

AJwNI  
Van91 I

AAGCAATTAGTTTGGAAAGCCAGAGCCTGGTTGATGTATTTCTGCTGACATCAGACCAAGAAGGCACTGTATTGGAAGCAGGCAGCC 153C  
TTCGTTAATCAAACCTTTCCGCTCTCGGACCAACTACATATAAGGACGACTGTAGTCTGGTCTTCCGTGACATAACCTTTCTGCTCCGTCGG  
K O L V W K A R A W L M Y I P A D I R P R H C I G K O A A  
S N F G K P E P G C I F L L T S D O E G T V L E S R O P  
K A I S L E S O S L V D V Y S C H O T K K A L Y W K A G S

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322 g-H-16-00.mpd (1 &gt; 2176) Site and Sequence

A stops here on 3' end  
AACACAGCCAAGCCATGCTCTGATATGGACCTTTCCACATTCTAAACACATCTCTGCAAAGTATGGCACAGCCTGAGTTTGAAA 162C  
TTGTGTCGGTTCGGTACGAGACTATACCTGGGAAAGGGGTGAAGGATTGTGTAGGAGGACGTTTCATACCGTGTCGGACTCAAACCTT

N T A K P C S D M D P F P T F L N T S S C K V W H S L S L K  
T O P S H A L I W T L S P H S T H P P A K Y G T A V K  
Q H S Q A M L Y G P F P H I P K H I L L O S H A O P E F E

GGACCGTTCACTTGCTTGGGCTTATTAAAGGTATAGTCCAAGTTGTGTCAAAGTGTATCAACAGACTCCACATCTAGCAGCAAGAGCAGT 171C  
CCTGGCAAGTGAACGAACCCGAATAATTTCCATATCAGGTTCAACACAGTTTGACATAGTTGTCTGAGGTGTAGATCGTCTGCTCGTCA

G P F T C L G L L K V S K L C O T V S T D S T S S S K S S  
D R S L A W A Y R Y S P S C V K L Y O O T P H L A A R A V  
R T V H L L G L I K G I V O V S N C I N R L H I O O E O

BspLU111 Tth111 Bpu101  
CTGGTGACATGTTTATACGACACAGTCCAAGAGAAGTAACCTAAGCGGGCTAAAATGCAGATGCTCAGCCTGTCTCTGAAGTGATTCT 180C  
GACCACTGTACAAATATGCTGTGCAGGTTCTCTTCATTGGATTGCGCCGATTTACGTCTACGAGTGCGGACAGAGACTTCACTAAAGA

L V T C L Y D T V O E K P K R A K M O M L T P V S E V I S  
W H V Y T T O S K R S N L S G L K C R C S R L S L K F L  
S G D M F I R H S P R E V T A G N A D A H A C L S D F

Eco571  
CCAACACAGACAGAAGTGTAAAGTGTGCGTTTATTCTGATTAAAATCACTGCCAATCTTGTGCCAGCTACAGTAACAGACACAGAGGGG 189C  
GGTTGTGTCTGTCTTGACATTTGACACGCAAAATAAGCATAATTTAAGTGACGTTAGAACACGGTTCGATGTCTGTTGTCTCTCCC

P T O T E L T V R L F V L K F T A N L V P A T V T D T E G  
Q H R O N C K L C V Y S Y N S L P I L C O L O O T O R G  
S N T D R T V N C A F I R I K I H C O S C A S Y S N R H R G

GTGGAGTCTGGCAGTCAAGACCGTACATCTGACTCTATGGGGAGGCTTGAGACTCAGGAGAATGACCTGAACCTGCGGCACAGGACCA 198C  
CAACCTCAGACCGTCAGTGTGGCATGTAGACTGAGATACCCCTCGGAAGTCTGAGTCTCTTACTGGACTGGGACGCGGTCTCTGGT

V G V W O S R P Y I L Y G E A D S G E P E P C G T G P  
L E S G S H D R T S D S M G R L E T O E N D L N P A A O D O  
G W S L A V T T V H L T L W G G L R L R R M T T L R H R T

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13f22 g+1 8-16-00.mpd (1 > 2176) Site and Sequence

Bbs I

BseR I

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BstX I

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TGGTAACGTCACCTTAGAGTGAAGATCCAATTTCCATCGAAAGATAGGTAGCGTTTACATACAGAAGAGGAGACGGYACATCTGATGTCA

T I A V E S H F V K G S F L S I A N V C L L L C ? V D Y S  
P L O W N L T S R L K V A F Y P S O M Y V F S S A ? T T V  
N H C S G I S L L G R L S I H R K C M S S P L P C R L O

EclH K I

TTTCCCAACCTCTCTCACCTTGACTCCTTGTCAAAGGGCTTTTAGGGAACCTTCATGTTCTGACAATTTAACTAATAAAACAAAAGCAAG 216C  
AAAGGGGTTGGAGAGAGTGGAACTGAGGAACAGTTTCCCGAAAATCCCTTGAAGTACAAGACTGTTAAATTGATTATTTTGTTCGTTT

F P O P L S P L L V K G L L G N F M F O F N N K S K  
F P N L S H L D S L S K G F G T S C S D N L T N K T K A S  
F S P T S L T L T P C O R A F R E L H V L T I L I K O K O

CCCCGTGAAAAAAAAA

2176

GGGGCACTTTTTTTTT

P R E K K  
P V K K K  
A P K K N

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CGGTATCGATACGCTTGATATCGAATTCGGCAGGAGCCGG 40  
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 GAGCCGATGCCATCGAGCCCCGCTACTATGAGAGCTGGAC 160  
 CCGGGAGACCGAGTCCACCTGGCTCACCTACACCGACTCG 200

210 220 230 240

GACGCGCTGCCAGCGCCGCGAGCCACGGACAGCGGCCCGG 240  
 AGGCGGGCGGCCCTGCACGCGGGTGTGCTGGAAGACGGGCC 280  
 GTCCTCTAACGGTGTGCTCCGACCTGCAGCCCCAGGTGGA 320  
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 GTCCCAACTCACAGAGCCTCAGCTCAGGCCCTCTGACCCA 400

410 420 430 440

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 GCCAAGCGAATGTCTGCAAGAGAAGTCTATCAGCGTCA 480  
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 CATGAACCTCTTTGTGGCGTCCAGTCAAAGAATATTGAAG 600

610 620 630 640

AAGTGGGTGTCACTCACTGAACGTGGATGCCTCTGAGCGA 640  
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810 820 830 840

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1010 1020 1030 1040

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2010 2020 2030 2040

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 CCGGTGAAAAA 2176

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DATE

PROPRIETARY INFORMATION BELONGING TO

## Exhibit 2

**From:** Richard Sheldon [RSheldon.2BURTT\_A.AND\_N@gvn002m.gv.us.pri.wyeth.com]  
**Sent:** **REDACTED**  
**To:** GSturrock.GICE01.USCE01@gvn002m.gv.us.pri.wyeth.com  
**Subject:** Sequencing Request 2368 Final Results



ID72\_\_hum ID72\_DF04  
Reference.Tonsensus\_92

Gunilla,

Here is the completed sequence for clone DF04Qp1 for ID72. There are a few differences with the provided reference sequence:

1. 1465 C to T shift
2. 2030 deletion of C
3. 2453 deletion of C

I will attach the reference sequence and consensus sequence in FASTA format. The clone is stored in the second -80 freezer on the right side of the lowest shelf. The DNA is in my small refrigerator in a box labeled "Gunilla's Projects."

rick

# Exhibit 2 (continued)

ID72\_\_human\_Reference.TXT

>ID72\_\_human\_Reference

ATGGGCTGCGGCGGGAGCCGGGCGGATGCCATCGAGCCCCGCTACTACGA  
GAGCTGGACCCGGGAGACAGAATCCACCTGGCTCACCTACACCGACTCGG  
ACGCGCCGCCCCAGCGCCGCGCCCGGACAGCGGCCCGAAGCGGGCGGC  
CTGCACTCGGGCATGCTGGAAGATGGACTGCCCTCCAATGGTGTGCCCCG  
ATCTACAGCCCCAGGTGGAATACCCAACCCAGAGAAGAAGACGAACTGTG  
AGACCCAGTGCCCAAATCCCCAGAGCCTCAGCTCAGGCCCTCTGACCCAG  
AAACAGAATGGCCTTCAGACCACAGAGGCTAAAAGAGATGCTAAGAGAAT  
GCCTGCAAAAGAAGTACCATTAAATGTAACAGATAGCATCCAACAGATGG  
ACAGAAGTCGAAGAATCACAAAGAACTGTGTCAACTAGCAGAGAGTCCAA  
GCAGAAGGGCAGATGGACTTCTTCAGTGTCTTCACGGCACTGGATCCCA  
TCAAAGAACCTTGAAGAAGTGGCTGCCCTTGCTGGACCTGAATTCTACT  
GAGTCCCTGGCAAGACTGTCTTACCTGGCAGCAAACCTGCTGCCTGATTTG  
TTGGGACCTTCTGAGCCTTCTACTTATCATGTAAATGTATTGGCACAGTG  
CTTACATATGTTAATAAACTGCAAATGTGCAGTTCAGTTTGTCTCTTTGC  
AACTCCTGTAATACGGTCTGGTGTAAAGTAGTGAGTTAAAGCTACAGGT  
CAGTTTATGAAACAGAAAAGTAGGAATGCATTTTCTGGGTGAAAGAGTCA  
CACCTTAGTGCTATAACTCTCCTGCCCATGATAGTGTATTCTGTTTCAGG  
CAAGCTTATTCTTTCCTTCTTTCATTTTAAATATTGTCAATTACAAATCTT  
ACCAGGTTCACTTAAAAGCTGGCTTTCATCCAACCTCTAAACCCACATATT  
GAAAAAATCAAGGTACAGGAAAACCTTGTATCCTTGTTCCTTAGCT  
TGGTATGAGACAGATCGGATCCAGTTTCCCATGCACCAACCCACTGCCCA  
TGGCATGTCTTTGGGAGGTGTCTGTGAAGCAGTCATACCTGCTCCTCATC  
TGCTTGAAAGTCTCCTATTCAGTGTCCATGTTGGCTCCAGTCTTA  
ATGTCACCATGCTTGTGGCCAATGCATCCAAATAAGGATACCCCTCAGGG  
CTCAGCTAGACATTGCAATTTTGCATAGCTTTCAGTTCCTTTGCTTGT  
CTTCTTGAAGTGTCTTCCCTCTCTATCGGGGTCACTTGCAATTGTTAATCA  
AAGATTGAACACTGCGTAGGAGAGGGAGATGATCCAGAGACATGTGGCAG  
CAGGCATGGCTTCCCCTTGGCCTCTCTGTACACTGCCCCAGGACTGTCAT  
TTTGGCATCTGCAAAAGGAATCACTTTAGAAAGCCAGCACCTGGTTGATGT  
GTATTCACTGACATTAGATTGATGTGCACTGCATTAGAAATGAGGTAG  
CTGACACAGAAAAAGGATGTTTTGATAGGAATAATTTTCTAGTATGTCTT  
GAAACATGTTTCTGGAAGTATTTTCTCCAAAGTAATGTAGCATGATT  
TTTCAAGGATTGTTAATCATGCCTGGGATTGGGAAAGATAGGACTAAAGTT  
GTGCCAAACTATATCAATAAATTCATGTTTAGCAGAAATAGGCAGCCTA  
TTGGTGTATGTTTATGTTAATAGTCCAGAGAACTGACATGCAGGTCAA  
AAGTCAGATACGCAACCTCCTTATCTGCTAACTCTGTTATTCTTCAAACA  
CAAGTGGGTAGTGTCAATTTTCTTCCCTTCCCTTCCATTGGCAGATTGTA  
TATTTATTCACAAAACATTAATGTCCATCCTGTGCCAGGTACTATGCAG  
ATGTTGAGGGATTTGGGGTCTGGTTAGTCGTGACTATCTATCCTGAATCT  
AACAGTGACTTCATAACTAGGAGACTGAATTAGACCCCTTAAGGTATAGTG  
TGTGTTGCAAACTCACTCTGCAATGGAACTTTTATATTACAGGTAGGTTT  
GTGTCTTAACTAGGTGTTCTAATCAATGTACAAGACTTTACCATACACG  
CAACTTTAGTTTTTCTAAACCTTCATCATTTTGTGATTCTTTGAGAAAGG  
GCTTTTAGGAACTTTATGTTCTAAAAAATGTTTTTAACAATAATAAGATA  
AAAGAAAAACCTGTGATTCATATGTCCCACTGGCATTACTCAGCAGGAG  
CCCCCAGCTGCCAAAGGTTGGCAGTGATCCTGCAAGTTCAAGGGCTCTT  
TCTCCTGGGGATGTCTTTGTGGCTTCTCTTTACAGCTTTGTTTCTGCA  
TCAGTTCAGTGTGATGTTGTTTGGAAATTTATCACCTTAAGAAAAGTGTC  
TCTGTTTTATATAGAAACACTTTCTCACTTACAGGGGAGAAAGGAAATGCA  
GGGCACATGATCTGGCCCTCCCCAGAACAACTGGATTTCACGGAGACAG  
CAACCAGAAGTTAAACCATGTGACTAAAAATGCATCTGGCTACTTTTTCA  
TGTATGTATGAGACAGAACTAATCCTTACTATCCTATTAGGATACCACT  
TTTCATTGCAAGTTTGTGTCAATAAAGTCATTAATTTTAAACAT

## Exhibit 2 (continued)

ID72\_DF04QP1\_Consensus\_92701.tx.TXT

>ID72\_DF04QP1\_Consensus\_92701.tx

GGTACCGGTCCGGAATCCCGGGATGCCGGACTAGGGGCGGCGGGCACC  
GCAGGAGCTCCGCGGGCTGCAGCGGGGCGGAGCGGGACGCGATGTC  
GCCGCCGCCGCTCCTTGCGGGCCGGGGCTGCGCTCCGGGGCTGAGCCG  
CCGCCAGAGCCGACAGCCGAGCAGCCGCTGGGCGCTCCCGCGGCGCAGGA  
GGATGGGCTGCGGCGGGAGCCGGGCGGATGCCATCGAGCCCCGCTACTAC  
GAGAGCTGGACCCGGGAGACAGAATCCACCTGGCTCACCTACACCGACTC  
GGACGCGCCGCCAGCGCCGCCGCCCGGACAGCGGCCCGAAGCGGGCG  
GCCTGCACTCGGGCATGCTGGAAGATGGACTGCCCTCCAATGGTGTGCC  
CGATCTACAGCCCCAGGTGGAATACCCAACCCAGAGAAGAAGACGAACTG  
TGAGACCCAGTGCCCAAATCCCCAGAGCCTCAGCTCAGGCCCTCTGACCC  
AGAAAAGAGATGGCCTTCAGACCACAGAGGCTAAAAGAGATGCTAAGAGA  
ATGCCTGCAAAAAGAGTCACCATTAATGTAACAGATAGCATCCAACAGAT  
GGACAGAAGTCGAAGAATCACAAGAACTGTGTCAACTAGCAGAGAGTCC  
AAGCAGAAGGGCAGATGGACTTCTTCAGTGTCTTCACGGCACTGGATCC  
CATCAAAGAACCTTGAAGAAGTGGCTGCCCCCTTGCTGGACCTGAATTCTA  
CTGAGTCCCTGGCAAGACTGTCTTACCTGGCAGCAAACCTGCTGCCTGATT  
TGTTGGGACCTTCTGAGCCTTCTACTTATCATGTAAATGTATTGGCAGAG  
TGCTTACATATGTTAATAAACTGCAAATGTGCAGTTGAGTTTGTCTCTTT  
GCAACTCCTGTAATACGGTCTGGTGTAAAAGTAGTGAGTTAAAGCTACAG  
GTCAGTTTATGAAACAGAAAAGTAGGAATGCATTTTCTGGGTGAAAGAGT  
CACACCTTAGTGCTATAACTCTCCTGCCCATGATAGTGATTCTGTTTCA  
GGCAAGCTTATTCTTCTCTTCTTCAATTTAAATATTGTCAATACAAATC  
TTACCAGTTCACTTAAAAGCTGGCTTTCATCCAACCTTAAACCCACATA  
TTGAAAAATCAAGGTACAGGAAAACTCCTTGTTATCCTTGTTTCTTAG  
CTTGGTATGAGACAGATCGGATCCAGTTTCCCATGCACCAACCCACTGCC  
CATGGCATGTCTTTGGGAGGTGTCTGTGAAGCAGTCATACCTGCTCCTCA  
TCTGCCTGGAAAGTCTCTATTCCAGTGTCCATGTTGGCCTCCAGTCTCT  
TAATGTCACCATGCTTGTGGCCAAATGCATCCAAATAAGGATACCCCTCAG  
GGCTCAGCTAGACATTGCAATTTTGCATAGCTTCCAGTTCCTTTGCTT  
GTCTTCTTGACTGTTTTCCCTCTCTATCGGGGTCACTTGCAATTGTTAAT  
CAAAGATTGAACACTGCGTAGGAGAGGGAGATGATCCAGAGACATGTGGC  
AGCAGGCATGGCTTCCCCTTGGCCTCTCTGTACACTGCCCCAGGACTGTC  
ATTTTGGCATCTGCAAAGGAATCACTTTAGAAAGCCAGCACCTGGTTGAT  
GTGTATTCACTAGCATTAGATTGATGTGCACTGCATTAGAAATGAGGT  
AGCTGACACAGAAAAAGGATGTTTTGATAGGAATAATTTTCTAGTATGTC  
TTGAAACATGTTTCTCTGGAAGTATTTTCTCCTCAAAGTAATGTAGCATGA  
TTTTTCAAGGATTGTTAACATGCCTGGGATTGGGAAAGATAGGACTAAAG  
TTGTGCCAAACTATATCAATAAATCCATGTTTAGCAGAAATAGGCAGCC  
TATTGGTGTTATGTTTATGTAACATAGTCCAGAGAACTGACATGCAGGTC  
AAAAGTCAGATACGCAACCTCCTTATCTGCTAACTCTGTTATTCTTCAA  
ACAAGTGGGTAGTGTCAATTTTCTTCTTCTTCCATTGGCAGATTGT  
ATATTTATTCAAAAACATTAAATGTCCATCCTGTGCCAGGTAATGCA  
GATGTTGAGGGATTGTTGGGCTGTTAGTCTGACTATCTATCCTGAATC  
TAACAGTGACTTCATAACTAGGAGACTGAATTAGACCTTAAGGTATAGT  
GTGTGTTGCAAATCACTCTGCAATGGAACTTTTATATTAGGGTAGGTT  
TGTGTCTTAACTAGGTGTTCTAATCAATGTACAAGACTTTACCATAAC  
GCAACTTTAGTTTTCTAAACCTTCATCATTTTGTGATTCTTTGAGAAAG  
GGCTTTTAGGAACCTTATGTTCTAAAAAATGTTTTTAACAATAATAAGAT  
AAAAGAAAAACCTGTGATTATATGTCCCCACTGGCATTACTCAGCAGGA  
GCCCCAGCTGCCAAAGGTTGGCAGTGATCCTGCAAGTTCAAGGGCTCTT  
TCTCCCTGGGGATGTGCTTTGTGGCTTCTCTTACAGCTTTGTTTCTGCA  
TCAGTTCAGTGCTGATGTTGTTGGAATTTATCACCTTAAGAAAGTGTCT  
TCTGTTTTATATAGAAACACTTTCTCACTTACAGGGGAGAAAGGAAATGCA  
GGGCACATGATCTGGCCCTCCCCAGAACAACTCTGGATTTACGGAGACAG  
CAACCAGAAGTTAAACCATGTGACTAAAAATGCATCTGGCTACTTTTTCA  
TGTATGTATGAGACAGAACTAATCCTTACTATCCTATTAGGATACCACT  
TTTCATTGCAAAGTTTGTGTCAATAAAGTCATTAATTTTAAACATAAAAA  
AAAAAAAAAAAAAAAAAAAAAAAAAGGGGCGGCCGCTCTAGAGTATCCCTCGAG  
GGGCCCAAGCTTACGCGT

Safran, Jeffrey B.

---

**From:** Fariba Shoarinejad [SHOARIF@wyeth.com]  
**Sent:** Wednesday, REDACTED 11:11 AM  
**To:** Safran, Jeffrey B.  
**Subject:** Fwd: Re: Your clone

And more..

>>> John A. Robinson REDACTED 2:57:11 PM >>>  
FYI, this is when I said we would accept the human clone from Invitrogen.

John

>>> Gunilla Sturrock REDACTED 9:32:16 AM >>>  
Thanks John,

I'll let Invitrogen know that we accept the clones.

Gunilla

>>> John A. Robinson REDACTED 7:42 AM >>>  
Hello Gunilla, the human Fragment 22 clone looks good, there is 136 bp more 5' UTR and more 3' UTR and the largest ORF from the human sequence information that you provided us is the same as the rat sequence. However, interestingly, of the 136 bp's additional 5' UTR, the first 25 bp's is odd. In a Celera search of the "assembled human sequence" we were not able to identify this first 25 bp's. However, if we search Celera's "unplaced fragments" we identified that 25 bp but it was located in a different chromosome region relative to the rest of the clone, so we are not sure what that first 25bp's is. I can tell you that we looked over 120,000 bp's 5' of the first exon that we have in the assembled human Celera sequence and we don't see that 25 bp sequence and I can tell you there is very little unsequence gaps in that 120,000bp. However, if you go further than 120,000bp's then there are more gaps and so it would be unreliable to look any further. Obviously we were trying to look for another exon 5' of our 1st exon. We looked this far because we know that intron 1 is big, 60kb. So in summary we are not sure what that first 25 bp's is. A Japanese group has recently published in the database the same sequence that we have with the same ORF that we predicted however they do not have the 25 bp of the 5' UTR that Invitrogen's clone has. We will try to do some RT-PCR with that sequence and 5' RACE to see if we have another exon. I have sent the predicted ORF amino acid sequence to Nancy to begin antibody production, but as yet we are not entirely sure whether there is another exon.  
John

>>> Gunilla Sturrock REDACTED 10:33 AM >>>  
Hi John,

I was wondering if you could give me an update on the Genoscope clone? Is it what you wanted? Did you get the ORF issues resolved?

Thanks,

Gunilla

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